

ENVIS Centre
Avian Ecology

ENVIS Newsletter

BUCEROS

Vol. 12, No. 3 (2007)



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ENVIS

ENVIS (Environmental Information System) is a network of subject specific centres located in various institutions throughout the country. The Focal Point of the present 78 ENVIS centres in India is at the Ministry of Environment and Forests, New Delhi, which further serves as the Regional Service Centre (RCS) for INFOTERRA, the global information network of the United Nations Environment Programme (UNEP) to cater to environment information needs in the South Asian sub-region. The primary objective of all ENVIS centres is to collect, collate, store and disseminate environment related information to various user groups, including researchers, policy planners and decision makers.

The ENVIS Centre at the Bombay Natural History Society was set up in June 1996 to serve as a source of information on Avian Ecology and Inland Wetlands.

ENVIS TEAM AT THE BNHS

Centre-in-Charge : Mr. J.C. Daniel
Project Coordinator : Dr. Asad R. Rahmani
Scientist-in-Charge : Dr. Girish A. Jathar
Information Officer : Ms. Kavita Mallya
Research Officer : Mr. Hemant Tripathi

Cover: Eurasian spoonbill
Platalea leucorodia
by Kedar Bhide

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Bombay Natural History Society,
Hornbill House, S.B. Singh Road,
Mumbai 400 001, Maharashtra, India.
Tel.: (91-22) 2282 1811,
Fax: (91-22) 2283 7615
E-mail: bnhs@envis.nic.in
Website: www.bnhsenvis.nic.in

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BIRD QUIZ



Safety nets to arrest bird freefall

Every monsoon, hundreds of Asian Openbills *Anastomus oscitans*, build small colonies atop Sal trees in Arrearjhar district, Assam and by the time the season draws to a close, dozens perish from falls or are struck by lightning during storms. Environmentalists have long racked their brains for a plan that would help reduce the death toll, but with no success. When some 50-odd Openbill chicks were found dead after a heavy downpour, forest officials decided to place safety nets under every Sal tree to prevent bird deaths.

Listed under Schedule IV of the Wildlife (Protection) Act, 1972, the Asian Openbills are commonly sighted in various parts of Assam but the current death

rate is a cause for worry. The birds build at least 300 nests in Arrearjhar annually, of which very few manage to survive the monsoon. According to official reports, the Rapid Action Programme of the Wildlife Trust of India has agreed to provide the nets. The nets, however, are only a partial and temporary solution. Forest Officials say that even if some chicks survived the fall, there is little expertise available to hand-rear the birds. Every attempt by villagers to hand-rear the chicks have failed so far.

Source: http://www.telegraphindia.com/1071024/asp/northeast/story_8464334.asp

No entry in Nalabana bird sanctuary

The forest department has declared the Nalabana bird sanctuary inside the Chilika Lake, Orissa - as "No entry zone" to curb poaching of the avian guests. Chilika Lake is the country's biggest waterfowl habitat where the migratory birds land in large numbers. Divisional Forest Officer (DFO) Chilika Wildlife Division, Abhimanyu Behera said that, as the concentration of the Siberian birds is maximum at the Nalabana bird sanctuary, it is declared a "No entry zone" for visitors to provide safety to the winged guests who migrate to the lagoon to escape the biting winter back home. He also added, that in order to curb poaching of birds the forest department has also set up a control-room, which is functioning round-the-clock to receive information about the poaching. Altogether 61 anti-poaching camps have been set up in different locations of the lake which includes two mobile squads moving in the 1100 sq

km Chilika and on the shore. One section of police force has also been deployed in the lake to assist the forest personnel. The bird protection committee formed with the involvement of local people had been extending their active cooperation by providing information on the poaching activities in the lake, Behera said. Meanwhile, despite efforts by wildlife officials to make the lake a no poaching area and provide safety to the winged guests, killing of the birds in the lake was witnessed this year as well, official sources said. The anti-poaching squad of the Chilika Wildlife Division had arrested four persons in this connection and seized 26 birds from them this year so far.

Source: http://www.worldpress.org/feed.cfm?http://timesofindia.indiatimes.com/Cities/No_entry_in_Nalabana_bird_sanctuary/rssarticleshow/2608954.cms



MICHEL PETER/WWF ORISSA

Government of Cambodia declares Sarus Crane Reserve:

The Boeung Prek Lapouv Sarus Crane Conservation Area, the first protected area in Cambodia was recently completed upon signing of a Prime Ministerial Decree by His Excellency Hun Sen. It is one of the most important sites globally for the fast declining South-east Asian race of Sarus Crane, *Grus antigone sharpii*. This would protect nearly 9,000 hectares, comprising 919 ha of core area and 8,305 ha in total, of seasonally inundated grasslands in Takeo Province in south-eastern Cambodia. The site is used by up to 300 Sarus Cranes, nearly 40% of the global population of the race *sharpii*. The Sarus Cranes arrive in December and remain until February when the site dries-up. The area has been declared a reserve after several years of active lobbying by the Wildlife Protection Office of the Forestry Administration (FA) (Cambodia's Ministry of Agriculture, Forestry and Fisheries) in partnership with BirdLife International in Indochina. There are only three other sites regularly used by this sub-species during the non-breeding season. Of these two are in Cambodia and the third in Vietnam. All three of these sites are under conservation management but only two are currently protected by law. BirdLife and the FA are now working to have the third Cambodian site at Kampong Trach, also protected by law. Since 2003,



KEDAR BHIDE

Boeung Prek Lapouv has been patrolled by a Site Support Group established by BirdLife, which has successfully prevented incursions by dry season rice farmers and hunters as well as raising awareness of the importance of the area's biodiversity, and the benefits of sustainable use, among the local communities. Other threats faced by the site include water draw-off for rice irrigation and the spread of the invasive plant *Mimosa pigra*.

Source: http://www.birdlife.org/news/news/2007/11/cambodia_sarus_cranes.html

Two men charged with Cyprus Falcon massacre

Two men have been charged in connection with the massacre of 52 Red-footed Falcons *Falco vespertinus* in the Phasouri area of Cyprus, within the Akrotiri British Sovereign Base Area (SBA). The accused, from the Limassol area, pleaded not guilty to the charges, which carry a penalty of up to three years imprisonment or a fine of £10,000 (•17,000), or both. The shocking massacre of the migrating falcons – the worst incident of bird of prey killing ever reported in Cyprus – made headlines across Europe after BirdLife Cyprus released shocking pictures of the gunned down birds. The Red-footed Falcon – a species of global conservation concern – appears to have been shot for target practice. The two suspects, arrested following a swift SBA Police investigation, appeared before an SBA court at Episkopi and were charged with deliberate killing of protected birds and unlawful possession of shotguns in a 'no hunting' area. After the October massacre, the SBA police and Cyprus Game Fund said they were stepping up joint anti-poaching patrols in the Akrotiri area. The main problem

on the peninsula in recent years has been the absence of such joint action. Taking advantage of this enforcement gap, illegal hunters have profited along the 'border' between the SBA and Republic, simply stepping across the dividing line to avoid either SBA Police or Game Fund patrols. BirdLife officials declare that they would keep a strong watch on the general poaching situation at Akrotiri and the Falcon trial and that they expect firm action in both areas. The Red-footed Falcon is a small, migratory Falcon and a colonial species that nests and migrates in groups. Strictly protected everywhere in the EU, the Red-footed Falcon has suffered severe decline in its main, eastern European breeding range in recent decades and is classified as Near Threatened. It is also listed in Annex I of the EU Birds Directive, which means Member States are obliged to make a special effort to conserve it.

Source: http://www.birdlife.org/news/news/2007/12/cyprus_falcons.html

Shore Birds

(Waders) of the Mumbai Region



Green Sandpiper *Tringa ochropus*

by **Suvrashis Sarkar**

The end of September or early October marks the arrival of huge congregations of shorebirds to the international business hub of India, Mumbai. This avian exuberance lasts till May followed by their emigration to their breeding quarters further north. The Mumbai region is an excellent example of how a heavily populated city can host rich biodiversity.

Among the plethora of plant and animal life, Mumbai region has 350 species of birds of which around 44 species are of shorebirds. Mumbai has diverse habitats: vast expanses of sandy and rocky sea-shores, mangrove forests, mud-flats, scrub forest, grasslands, hills, lakes and ponds. Being on the edges of the Western Ghats, it enjoys a rich biodiversity. Factors like stable climatic conditions and copious food availability

make Mumbai a very important stop-over site for many species of shorebirds on their way to peninsular India, making it an important site for them.

It has been observed at times that some species of shorebirds such as red-shanks, green-shanks, Lesser Sand-plover *Charadrius mongolus* and Dunlin *Calidris alpina* over-winter i.e. stay back even after the wintering period is complete. The areas around the Mumbai region shelter these birds and hence Mumbai region is very important for the survival of the species. Shorebirds show “site-fidelity”, i.e. returning to the same area every year. Many birds would often return to the same beach or area of a creek / estuary each year. These complex behavioural and migratory patterns among shorebirds was probably built over thousands of years ago.

A list of the shorebirds of Mumbai

COMMON NAME	SCIENTIFICNAME	STATUS
Family: Jacanidae		
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	R
Bronze-winged Jacana	<i>Metopidius indicus</i>	R
Family: Rostratulidae		
Greater Painted-snipe	<i>Rostratula benghalensis</i>	R
Family: Haematopodidae		
Eurasian Oystercatcher	<i>Haematopus ostralegus</i>	M
Family: Charadriidae		
Pacific Golden Plover	<i>Pluvialis fulva</i>	M
Grey Plover	<i>Pluvialis squatarola</i>	M
Common Ringed Plover	<i>Charadrius hiaticula</i>	M
Little Ringed Plover	<i>Charadrius dubius</i>	M
Kentish Plover	<i>Charadrius alexandrinus</i>	M
Lesser Sand Plover	<i>Charadrius mongolus</i>	M
Greater Sand Plover	<i>Charadrius leschenaultii</i>	M
Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	R
Red-wattled Lapwing	<i>Vanellus indicus</i>	R
White-tailed Lapwing	<i>Vanellus leucurus</i>	MU
Family: Scolopacidae		
Eurasian Woodcock	<i>Scolopax rusticola</i>	M
Pintail Snipe	<i>Gallinago stenura</i>	M
Common Snipe	<i>Gallinago gallinago</i>	M
Jack Snipe	<i>Lymnocyrtus minimus</i>	M
Black-tailed Godwit	<i>Limosa limosa</i>	M
Bar-tailed Godwit	<i>Limosa lapponica</i>	M
Whimbrel	<i>Numenius phaeopus</i>	M
Eurasian Curlew	<i>Numenius arquata</i>	M
Spotted Redshank	<i>Tringa erythropus</i>	M
Common Redshank	<i>Tringa totanus</i>	M
Marsh Sandpiper	<i>Tringa stagnatilis</i>	M
Common Greenshank	<i>Tringa nebularia</i>	M
Green Sandpiper	<i>Tringa ochropus</i>	M
Wood Sandpiper	<i>Tringa glareola</i>	M
Terek Sandpiper	<i>Xenus cinereus</i>	M
Common Sandpiper	<i>Actitis hypoleucos</i>	M
Ruddy Turnstone	<i>Arenaria interpres</i>	M
Sanderling	<i>Calidris alba</i>	M
Little Stint	<i>Calidris minuta</i>	M
Temminck's Stint	<i>Calidris temminckii</i>	M
Dunlin	<i>Calidris alpina</i>	M
Curlew Sandpiper	<i>Calidris ferruginea</i>	M
Broad-billed Sandpiper	<i>Limicola falcinellus</i>	M
Ruff	<i>Philomachus pugnax</i>	M
Family: Recurvirostridae		
Black-winged Stilt	<i>Himantopus himantopus</i>	M
Pied Avocet	<i>Recurvirostra avosetta</i>	M
Family: Phalaropidae		
Red-necked Phalarope	<i>Phalaropus lobatus</i>	MU
Family: Dromadidae		
Crab Plover	<i>Dromas ardeola</i>	M
Family: Glareolidae		
Oriental Pratincole	<i>Glareola maldivarum</i>	MU
Small Pratincole	<i>Glareola lactea</i>	M
R – breeding resident, M – winter migrant, MU - uncommon migrant		



KEDAR BHIDE

Pied Avocet *Recurvirostra avosetta*

The Mumbai region is today facing ever increasing pollution and developmental pressure. The region's vast expanse of coastal belt supports rich mangrove forests and diverse marine life. Sadly, however, this natural wealth is facing the wrath of human encroachment. Mangrove forests, most commonly perceived as "wastelands" are being reclaimed for real estate development. Shorebirds being a part of wetlands ecosystem are very susceptible to habitat disturbances, and hence they are one of the best indicators of the health of wetland ecosystems. The main threats are reclamation of coastal wetlands, siltation, agricultural intensification, drainage and pollution. Therefore, it must be our priority to do everything possible to protect their habitats and ensure their healthy survival.

The Sewri Bay and Thane Creek do not have any legal status. They have been declared as an Important Bird Area (IBA) by the Bombay Natural History Society (BNHS) and Birdlife International in 2004. Since this site fulfills all the prerequisites of the Ramsar Convention, it should be declared a Ramsar site. Along with this it should also be given status of a Sanctuary which will give it adequate protection in legal terms. There should be effective control on the pollution of the creek and all encroachment and reclamation activities should be stopped. Last but not least, education and awareness among the people of Mumbai is essential.

The important hotspots for shorebirds in the Mumbai region are Alibaug, Datiware shores most famous for Oystercatchers, Gorai shoreline, Kelve shoreline, mangroves and creek of Malad, mudflats, mangrove patches and creek of Navi Mumbai, Sewri bay which is most famous for flamingos, Thane creek - declared as an IBA of India, Uran and Nhava-Sheva wetlands.

The New Odyssey Revisited

Dr. Girish Jathar

Scientist-in-charge, ENVIS Centre/BNHS

Recently a team of researchers from the Czech Republic along with the Bombay Natural History Society (BNHS) successfully fitted radio tags and Satellite Telemetry to the Black Stork *Ciconia nigra* that migrates to India during winter.

The successful effort is a part of the Czech project 'The New Odyssey' that monitors the migration patterns of the Black Stork using a technique known as Satellite Telemetry. The

wonders of satellite technology and international collaboration brought Dr Lubomir Peske, an ornithologist and three other persistent Stork chasers from the Czech Republic to Mumbai.

The Black Stork is a winter migrant to India and is found on the coastlines, and in parts of Northern and Central India. Although the migration of the bird has always remained a mystery, ornithologists believe that they breed in the Palearctic forests and migrate



VIJAY KHAWALE

Scientists tracking Black Storks using radiotelemetry



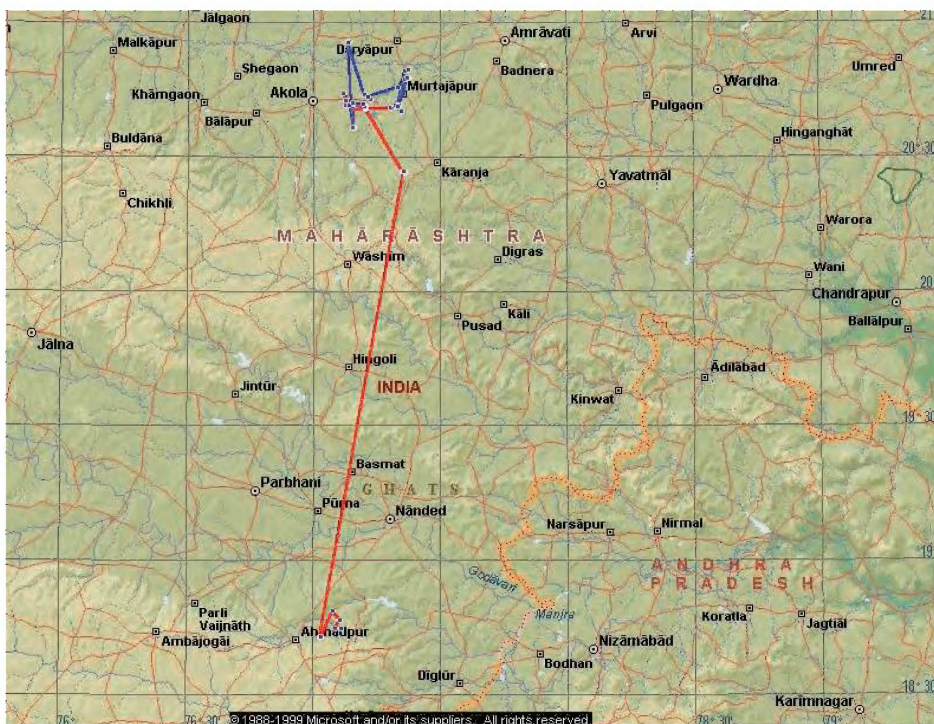
Dr. Lubomir Peske fitted a Sattelite telemetry to a Black Stork and released it

individually to Asia and Africa during the winter.

In 2002, a team of Czech scientists and enthusiasts visited India to track two Black Storks satellite tagged in Siberia. As a BirdLife International Partner and reputed research institute, the BNHS was involved in this project. The Czech and the BNHS teams monitored the storks in Gujarat and Madhya Pradesh for some days. In continuation of this study the Czech team decided to catch Black Storks in their wintering ground and track them back to their breeding areas.

The satellite signals have revealed that both the Storks were in the vicinity and moving in a radius of 20 km during the last week of December 2007. In mid January 2008 one of the storks travelled 219 km south and reached near Ahamadpur town in Latur district while the other is still wandering in Akola district of Maharashtra.

Scientists believe that they will stay here till the end of March, after which they will migrate to Siberia for breeding. The birds will be monitored for two years and naturalists believe it may reveal some more secrets of this elusive bird.



Results of locations of the Storks fitted with Sattelite telemetry

Critically Endangered The Forest Owlet *Heteroglaux blewitti*

This recently rediscovered species has a tiny, severely fragmented population known from less than ten recently noted localities. It is inferred to be declining as a result of loss of its deciduous forest habitat and anthropogenic pressures. These factors qualify it as Critically Endangered.

It is a typical owlet with a rather plain crown and heavily banded wings and tail. The crown and nape are dark grey-brown, faintly spotted white. The wings and tail are white, broadly banded, blackish-brown and, with a broad white tail-tip. Dark brown breast with broad, prominent barring on flanks. Rest of the underparts is white. The facial disc is pale and the eyes are yellow. Territorial call is rather loud, mellow *uwuw* or *uh-wuwuw*. Calls include hissing *shreeee* or *kheek* and repeated *kwaak* notes, rising and falling in pitch.

Forest Owlet is endemic to central India. Until its rediscovery in 1997, after 113 years, it was known from seven specimens collected during the 19th century at four localities in two widely separated areas, northern Maharashtra, south-east Madhya Pradesh and western Orissa. In 2000, a survey of 14 forest areas across its former range located 25 birds at four sites in northern Maharashtra and south-western Madhya Pradesh. No birds were found in a brief survey of its former eastern range in Orissa. A survey carried out in 2004 in 10 protected areas of Maharashtra revealed 98 individuals in Melghat Tiger Reserve and Toranmal Reserve forest. Subsequently it was also reported from Yawal Wildlife Sanctuary. Another survey in 2007, in Burhanpur and Khandwa districts of Madhya Pradesh revealed 19 individual in three forest ranges.

It is a resident species which shows strong site fidelity. It prefers open type of Teak dominated forest. Most historical records came from deciduous forest or dense jungle, the altitudinal range of which is unclear, although most specimens were collected in plains forest. Recent studies suggest that they are found from plain level forests up to 650m up in the hills. This suggests that their recent observations from hill slopes may represent birds in suboptimal habitat. It appears to be quite strongly diurnal and fairly easy to detect,



GIRISH JATHAR

Forest Owlet *Heteroglaux blewitti*

frequently perching on prominent bare branches. Rodents, lizards, small birds and insects are their prey species.

The Forest Owlets have a prolonged breeding season from October to May. The hatching success is 59% and the overall fledgling success is 41%. Predation of fledglings, egg removal from nest, ovicide and infanticide are the major factors influencing the overall breeding success of the Forest Owlet.

Encroachments, increasing use of pesticide and rodenticides, illicit woodcutting, grazing and superstition among tribals are deterrents to the survival of the Forest Owlet. Community management, joint forest management and public awareness are the key factors in long term conservation of the species.

Source: BNHS Library/ BirdLife International



Bird Quiz

"Eat like a bird" : Many birds eat twice their weight a day!
Take the Bird Quiz and find out more about these flying marvels!!



Name the group of these birds:

[Numbers in brackets = Number of letters in each word]

1. A group of chickens (4)
2. A group of larks (10)
3. A group of owls (10)
4. A group of ravens (6)
5. A group of geese (6)



Avian-terms: Guess a term for each of the following.

1. A large accumulation of birds faeces (like in sea bird colony) (5)
2. Staying still in mid air (8)
3. A very young bird (9)
4. The seasonal movement of birds (9)
5. Random foraging for insects & or seeds on ground by birds (8)

Birdsearch: Search the bird in the maze below with the help of clues given below

A	W	Q	D	A	R	T	E	R	E	C
G	Y	W	A	N	I	U	T	W	F	H
E	J	M	Z	C	J	T	F	U	L	O
T	A		D	R	O	N	G	O	K	U
X	C	E	S	F	B	P	O	L	U	G
Z	A	X	A	V	O	C	E	T	H	L
S	N	W	R	Y	U	I	P	O	Y	U
Q	A	L	B	A	T	R	O	S	S	K

1. This bird is known for its mimicry.
2. These birds have long toes which enable them to walk on floating vegetation.
3. This bird has longest wingspan about 11 feet.
4. This bird has long, thin, upcurved bills giving their scientific name *Recurvirostra*.
5. This bird uses its sharply pointed bill to spear its prey when they dive.
6. This bird belonging to the crow family resembles the House Crow and has a red beak.

Amazing bird facts..!!

- Ducks on the outer edge of the group sleep with one eye open. Those in the center of the group feel protected and close their eyes!!!
- The first bird domesticated by man was the goose.
- Roosters can't crow if they can't fully extend their necks.
- The House crow is found throughout the world and lives everywhere but deserts and mountain tops.

Answers to BIRD QUIZ

K	S	S	O	R	T	A	B	L	A	Q
U	Y	O	P	I	U	Y	R	W	N	S
L	H	T	E	C	O	V	A	X	A	Z
G	U	L	O	P	B	S	F	E	C	X
U	K	O	N	G	O	R	D		A	T
O	L	U	F	T	J	C	Z	M	J	E
H	F	W	T	U	I	A	N	W	Y	G
C	E	R	T	E	A	R	D	W	A	A

Answers to Bird Quiz

Name a group of these birds:

1. Peep
2. Exaltation
3. Parliament
4. Murder
5. Gaggles

Avian-terms

Birdsearch

1. Guano

2. Hovering

3. Fledgling

4. Migration

5. Gleaning

THE BNHS'S PUBLICATIONS

	Non-Members	Members
1. The Book of Indian Birds by Sálim Ali, 13th edition	495.00	370.00
2. A Pictorial Guide to the Birds of the Indian Subcontinent by Sálim Ali & S. Dillon Ripley, 2nd edition	under revision	
3. A Guide to the Cranes of India by Prakash Gole	75.00	70.00
4. Birds of Wetlands and Grasslands by Asad R. Rahmani & Gayatri Ugra	500.00	375.00
5. Birds of Western Ghats, Kokan and Malabar by Satish Pande, Saleel Tambe, Clement Francis M. & Niranjan Sant	995.00	750.00
6. Petronia by J.C. Daniel and Gayatri Ugra	360.00	270.00
7. The Book of Indian Animals by S.H. Prater, 3rd edition	275.00	210.00
8. A Week with Elephants — Proceedings of the Seminar on Asian Elephants, June 1993 Edited by J.C. Daniel & Hemant Datye	450.00	340.00
9. The Book of Indian Reptiles and Amphibians by J.C. Daniel	595.00	445.00
10. The Book of Indian Shells by Deepak Apte	295.00	225.00
11. The Book of Indian Trees by K.C. Sahni, 2nd edition	295.00	225.00
12. Some Beautiful Indian Climbers and Shrubs by N.L. Bor & M.B. Raizada, 2nd edition	525.00	390.00
13. Common Indian Wildflowers by Isaac Kehimkar	375.00	280.00
14. Illustrated Flora of Keoladeo National Park, Bharatpur by V.P. Prasad, Daniel Mason, Joy E. Marburger & C.R. Ajithkumar	695.00	520.00
15. Cassandra of Conservation Edited by J.C. Daniel	200.00	150.00
16. Important Bird Areas in India - Priority sites for conservation Compiled and edited by - M.Zafar-ul-Islam & Asad R. Rahmani	3000.00	2250.00
17. Uttar Bharat ke Pakshi (Hindi) by Richard Grimmett, Tim Inskipp and Satyapraksh Mehra	500.00	375.00
18. Uttar Bharat na Pakshiyo (Gujrati) by Richard Grimmett, Tim Inskipp and Sarita Sharma	500.00	375.00
19. Shumali Hindustan ke Parinde (Urdu) by Richard Grimmett, Tim Inskipp and M. Zafar-ul Islam	500.00	375.00
20. Threatened Birds of India Compiled by M. Zafar-ul Islam and Asad R. Rahmani	75.00	75.00
21. Field Methods for Bird Surveys by Salim Javed and Rahul Kaul	150.00	150.00
22. Indian Bird Banding Manual. Compiled by S. Balachandran	100.00	100.00
23. Birds of Sanjay Gandhi National Park by Sunjoy Monga	50.00	40.00
24. National Parks and Sanctuaries in Maharashtra, Vol. I & II Pratibha Pande	500.00	375.00
25. In Harmony with Nature by BNHS and RSPB by V. Shubhalaxmi, P. Mahajan, V.G. Gambhir, M. Joshi and M. Ansari	350.00	315.00
26. Treasures of Indian Wildlife by A.S. Kothari & B.F. Chappgar	1900.00	1200.00

BOMBAY NATURAL HISTORY SOCIETY

Founded in 1883 for the study of natural history, the Bombay Natural History Society (BNHS) is now one of the premier research and conservation organisations in the country. The Society publishes a journal, the Journal of the Bombay Natural History Society, devoted to natural history and also has a popular publication, Hornbill, for the layman. It has also published a number of books on wildlife and nature. Its library has a large collection of books and scientific journals on wildlife and the environment. The Society's invaluable collection of bird, mammal, reptile, amphibian, insect and plant specimens has been recognised as a National Heritage Collection.

Membership of the Society is open to individuals and institutions within India and abroad. For more details, please write to:

Membership Officer,
Bombay Natural History Society,
Hornbill House,
Shaheed Bhagat Singh Road,
Mumbai-400 001. INDIA.

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Address for correspondence

Project Coordinator
ENVIS Centre,
Bombay Natural History Society,
Hornbill House, Shaheed Bhagat Singh Road,
Mumbai - 400 001. INDIA.

Tel: (91-22) 22821811
Fax: (91-22) 22837615
Email: bnhs@envis.nic.in
Website: www.bnhsenvis.nic.in,

EDITORIAL TEAM: Dr. Asad R. Rahmani, Mr. J.C. Daniel, Dr. Girish Jathar, Ms. Kavita Mallya

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